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EXAMINER				
PIERCE, WILLIAM M				
ART UNIT		PAPER NUMBER		
3711				
NOTIFICATION DATE		DELIVERY MODE		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/814,226

Applicant(s)

FORD ET AL.

Examiner

William M. Pierce

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 14-32 and 34-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 14-32 and 34-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/S508)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

This application has been reopened after the Board decision dated 3/23/09 under 37 CFR § 1.198 with the written authority of the Director. Sufficient cause and the existence of newly applied references is set forth below. The TC Director's approval has been placed on the action reopening prosecution.

REASONS FOR REOPENING PROSECUTION

The issue placed before the board was an apparatus claim for a "flooring" system to be used in constructing a bowling alley. Claim 1 reproduced below is representative:

1. (original) A prefabricated flooring system adapted for use in a bowling center, comprising a plurality of wooden boards having a longitudinal axis, the Plurality of wooden boards each having substantially flat side edges along the longitudinal axis, interior boards of the plurality of wooden boards being bonded together by an adhesive applied on the side edges and two of the outermost boards of the plurality of wooden boards being bonded only on one side edge by the adhesive to adjacent corresponding interior boards to form a preformed section of wooden boards.

The art applied in the appealed rejection to DeVore showed all of the structure recited in the claims with the exception of the functional term "prefabricated" and phrase "to form a preformed section of wooden boards". Since these recitations in the claims were functional and only directed to the intended method of making the apparatus, they were not considered to amount to any structural difference in the claimed they were treated under 35 USC 102. See final rejection 11/03/2006, pg. 2.

The Board reversed the examiners position stating;

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"The Examiner has not identified a teaching in De Vore of bonding a plurality of wooden boards together into a particular arrangement (e.g., structure) at a location that is distinct from the installation site. Accordingly, we are not persuaded by the Examiner's conclusion that the "terms prefabricated and preformed impart no known structural difference over the applied art" (*id.*). To the contrary, there can be no doubt that a single piece of dimensional lumber (e.g., a 2 by 4) has a structure that is distinct from a plurality of 2 by 4's that are bonded together along their side edges. The Examiner has not addressed this structural difference. Accordingly, the preponderance of the evidence on this record favors Appellants." (Board Decision BD, 3/23/09, pg. 7, 3rd para.)

While it is clear that the examiner does not share the Boards position that reads limitations into the claims that are not there, it is more concerning that they apparently failed to appreciate the well known and common practice in many arts of manufacturing a device offsite. Void in the Board Decision is any discussion or recognition of what one skilled in the art would have found obvious with respect to the "prefabrication" of an apparatus. This practice is well known and commonly practiced to provide better quality controls, efficiency and reduce installation time on site. This is done with roof trusses, pre-cast concrete, tile mosaics. Well known is that manufacturing devices in a central and controlled environment can improve quality and save time and money. Prefabrication of lane panels is further known and in much of the art of record that was made before the Board, particularly to Heddon 4,169,602 that was mentioned to applicant in the final rejection. Since applicant is not the inventor of "prefabricating" an apparatus such as a bowling lane component, the prosecution has been reopened to directly apply the relevant art.

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Upon reversing the examiner for failing to "meet his burden of establishing a prima facie case of anticipation" (BD, pg. 8, ln. 1), the Board did not subsequently address in detail the examiner's findings of obviousness set forth in the final rejection. But they apparently hinted that;

"The Examiner has not provided evidence or reasoning as to why it would have been prima facie obvious for a person of ordinary skill in this art to bond a plurality of wooden boards, in a particular arrangement, through the use of an adhesive to arrive at a "preformed section of wooden boards" or a "prefabricated" section of wooden boards that falls within the scope of Appellants' claims. *Fritch*, 972 F.2d at 1265." (BD, pg. 9, ln. 3).

Claim Rejections - 35 USC § 112

Claims 7 and 40 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 7 and 40, the "remaining sections of the approach section" is inferential and lacking a proper antecedent basis.

Claim Rejections - 35 USC § 102

Claims 1, 4, 6, 8-12, 14-19, 24, 25, 28, 30-32, 34 and 38-40 are rejected under 35 U.S.C. 102(b) as being anticipated by Heddon 4,169,602.

As to claims 1 and 38, Heddon shows a prefabricated flooring system (abstract, ln. 1) comprising a plurality of wooden boards bonded together by an adhesive (col. 5, lns. 35-37) on its side edges as shown in fig. 15C at 100 and 102. While Heddon does not discuss the two outermost boards, such considered

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inherent and shown by his fig. 10 where only one side edge needs adhesive since there is no adjacent board. As to claim 4, 17, 18, 24, 30 and 39 the flooring system used in an approach is shown making up elements 20, 26 and 28. The thickness of the approach is considered the approximately the same as described at col. 6, Ins. 29-33. The bowling alley of Heddon is considered laminated as called for by claims 25, 28 and 40 and as described in the abstract at line 3 of Heddon. Elements 20 and 26 are approximately equal to the width of a bowling alley as called for by claim 19. Element 28 is a filler section to extend past the gutters and ball return of the alley. Known is that a bowling lane is between 41 and 42 inches and as such the approach of Heddon consisting of 20, 26 and 28 is wider as shown in fig. 1. As to claim 6, Heddon shows the preformed section 20 and 26 used as a section of an approach. As to claims 8 and 31, finishing the lane is shown at col. 7, ln. 14. Curable polyurethanes are well known and considered inherent in Heddon. A fiberboard OSB underlayment as called for by claims 9-12 and 32 is shown at 50 which is bonded to the boards (col. 5, ln. 42). An integrated foul line as called for by claims 14 and 34 is shown at 18 that is bonded to a groove as shown in fig. 12 (col. 5, ln. 21) as called for by claim 15. The foul line is considered to be a block as shown in fig. 12 and called for by claim 16.

Claim Rejections - 35 USC § 103

Claims 2, 3, 26 and 27 are rejected under 35U.S.C. 103(a) as being unpatentable over Heddon 4,169,60.

Heddon does not mention the thickness of the boards. To have made the boards between $\frac{3}{4}$ and 2 $\frac{3}{4}$ inches would have been an obvious matter of choice depending upon the desired costs to manufacture, durability and weight. Such a thickness has not been shown to be critical to applicant's claimed invention by solving any particular problem or producing any unexpected results.

Claims 5 and, 29 are rejected under 35U.S.C. 103(a) as being unpatentable over Heddon 4,169,60 in view of De Vore 2,969,983.

While Heddon does not discuss the type of adhesive used to bond the boards, DeVore teaches in bowling alleys that any suitable adhesive may be used (col. 4, ln. 55). As such to have selected a suitable adhesive such as those called for in claims 5 and 29 would have been an obvious matter of selecting a known adhesive suitable for it intended use. See *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960) (selection of a known plastic to make a container of a type made of plastics prior to the invention was held to be obvious). Applicant has not shown where the adhesives claimed solve any particular problem or produce any unexpected results.

Claims 7 and 40 are rejected under 35U.S.C. 103(a) as being unpatentable over Heddon 4,169,60 in view of Perrier 5,888,142.

Heddon describes his approach as a "smooth wooden surface" (col. 4, ln. 46) and fails to mention the use of synthetic boards. Perrier teaches that the bowling lanes may be made of wood or synthetic material (col. 3, ln. 44). To have used synthetic boards on the approach section of Heddon would have been

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obvious in order to take advantage of the known properties of synthetic materials.

Such a selection has been held obvious in *Sinclair & Carroll Co. v. Interchemical Corp.*, 325 U.S. 327, 65 USPQ 297 (1945).

Claims 20, 21, 35 and 36 are rejected under 35U.S.C. 103(a) as being unpatentable over Heddon 4,169,60 in view of Lessard 6,645,082.

Heddons invention does not use nails or screws. However, the used of screws and plugs to secure bowling lane sections such as in Heddon is old as taught by Lessard. To have used the combination of drilled holes, screws and plugs in Heddon as taught by Lessard would have been obvious in order to replace one known method of mounting bowling lane panels for that of another.

Claims 22 and 37 are rejected under 35U.S.C. 103(a) as being unpatentable over Heddon 4,169,60 in view of Scottman 4,146,223.

Heddon does not discuss range finders. Such are old and well known as taught by Scottman who teaches adding wooden bolts or dowels 41 which are used for positioning and targeting of the ball. To have included wooden dowel range finders in Heddon would have been obvious in order to help a player's aim and delivery.

Claims 22 is rejected under 35U.S.C. 103(a) as being unpatentable over Heddon 4,169,60 in view of Sawdust Making 101.

Heddon does not discuss any wood joinery in his patent. However, the use of finger joints in the art of wood working is well known in order to attach two

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pieces of wood together. To have used finger joints on the abutting boards of Heddon would have been obvious in order to join two shorter boards together.

Claims 1-12, 17-32 and 35-40 are rejected under 35U.S.C. 103(a) as being unpatentable over De Vore as set forth in the previous office action and further in view of Heddon 4,169,602

"As to claims 1, 8, 19, 24, 25, 30, 37 and 38, DeVore shows wooden boards 47 held together by adhesive "between the contacting surfaces" (col. 5, ln. 59). As to claim 9, an underlayment 41 is shown. DeVore teaches assembling the boards onsite and using a bar clamps 57 and 58 until the adhesive has cured (col. 5, ln. 34). He does not mention the building of any of the components in a factory. Heddon teaches in bowling lanes constructed of hardwood strips such as that of DeVore that they may be prefabricated or "fabricated in modules at a manufacturing facility" (abstract, ln. 1) to reduce time and cost (col 1, ln. 15)"

While DeVore fails to mention making portions or the entire assembly of his invention offsite and bringing these components to a point of installation, doing such is considered old and well known in order to control quality, improve efficiency and save installation time. Heddon teaches prefabricating bowling lanes. To have prefabricated the assembly of DeVore by gluing the board to the base offsite in component sections would have been obvious in order to reduce the amount of time it would take to install onsite.

As to claims 6, 24, 31, 39 and 40, DeVore discloses a "bowling alley" and approach area 10. DeVore does not specifically intend his invention to only be applied to the part of the bowling lane upon which the ball is intended to be rolled towards the pins. In fact his disclosure is broad pertaining to, "construction... in securing of the bowling alley surface boards" (col. 1, ln. 17), which includes the approach area as shown by 10 in his fig. 1. We can further

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see from U.S. Patent 7,022,024 that the term "bowling lane" applies to all sections of the lane including the "approach area, a pin deck area and a lane area" (col. 1, ln. 53). Likewise, see 6,988,953, col. 1, lns. 11-19 and 6,645,082, col. 1, ln. 10. DeVore discloses the use of adhesive "between the boards" as it penetrates during the building process. Col 5, Ln. 57+ goes into more detail that "the adhesive...is to a certain extent forced between the contacting surfaces of said boards., not only securing the contacting lower surfaces of the alley boards but likewise and simultaneously securing the said boards to one another".

The size of the boards in claims 2, 3, 26 and 27 is considered an obvious matter of choice and has not being shown to be critical. See In *Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), cert. denied, 469 U.S. 830, 225 USPQ 232 (1984). DeVore shows an approach section 10 as called for by claim 4. The size of the approach as called for in clam 4, 17, 18 and 28 is considered an obvious matter of choice (*Gardner v. TEC Systems*. DeVore teaches the use of any suitable adhesive (col. 4, ln. 55) to meet the limitations of claims 5 and 29. As to claims 7 and 40, the use of synthetic materials in place of wood is well known. As to claims 10, 11 and 32, the use of fiberboard, such as OSB Oriented Strand Board in place of plywood is old and well known. The underfloor 41 is adhesively secured to the boards 47 as called for by claim 12 (col. 6, ln. 3)."

As to clams 20, 21, 35 and 36, counter sunk screws and plugs are well known mechanical fasteners. To have replaced the adhesive of DeVore with that

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of a mechanical fastener would have been obvious to have replace one known mechanical fastening expedient for that of another. The use of dowels for range finders as called for in claim 22 and 37 is old and well known. As to claim 23, the use of mortise and finger joints to connect two wood elements together is considered to be old and well known. DeVore shows the use of such dovetails 17 and 18 (col. 2, Ins. 51-59) that are considered "interleaved finger joints" along a short side of adjacent floor sections. The interpretation of the dovetails of DeVore meeting the limitations of "finger joints" is supported by "Wikipedia, the free encyclopedia" http://en.wikipedia.org/wiki/Finger_joint (attached here) where a finger joint is described as "much like a dovetail". To have use a finger joint in DeVore would have been obvious in order to obtain a stronger joint." DeVore clearly contemplates the use of fasteners as his "sub-baseboard 33 is secured along its edges to each of the transverse beams 25 by means of screws" (col. 4, ln. 24). Pre-drilling for screw fasteners is old, well known and not considered a patentable advance. With respect to the "materials not invented" at the time of DeVore, it is known to be obvious to use a material to take advantage of its known properties. To apply newly available materials for their intended purpose to old products is not inventive and has been held obvious.

Claims 14-16, 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeVore in view of Heddon and further in view of Heddon 5,348,513 as set forth in the previous office action.

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Devore does not detail his foul line 12. Heddon teaches the use of embedded foul lines at the edge of lane panels. To have used a separated bonded piece as foul line 12 in DeVore would have been obvious method of making foul lines known in the art.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William Pierce whose telephone number is 571-272-4414 and E-mail address is bill.pierce@USPTO.gov. The examiner can normally be reached on Monday and Friday 9:00 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, communication via email at the above address may be found more effective. Where current PTO internet usage policy does not permit an examiner to initiate communication via email, such are at the discretion of the applicant. However, without a written authorization by applicant in place, the USPTO will not respond via Internet e-mail to any Internet correspondence which contains information subject to the confidentiality requirement as set forth in 35 U.S.C. 122. A paper copy of such correspondence will be placed in the appropriate patent application. The following is a sample authorization form which may be used by applicant:

"Recognizing that Internet communications are not secure, I hereby authorize the USPTO to communicate with me by responding to this inquiry by electronic mail. I understand that a copy of these communications will be made of record in the application file."

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For further assistance examiner's supervisor, Gene Kim can be reached on 571-272-4463. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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